ELEMENT ONE: INTRODUCTION GOALS AND OBJECTIVES REVIEW OF EXISTING PLANS

Element One is the first in a series of seven elements that have been established to facilitate the development of the 2000 Arizona State Aviation Needs Survey (SANS). The SANS has been sub-divided into these elements to allow for the periodic review of the study findings by other concerned parties. Suggested revisions from these periodic reviews will be incorporated into the final SANS documentation.

The focus of Element One is to provide an overview of the study process as well as to define the goals and objectives of the SANS. Element One is divided into the following sections:

- Project Description
- Issues
- Goals and Objectives
- Review of Existing Plans

Each of the above referenced sections will provide adequate details to better understand the procedures, definitions, assumptions, constraints, and information sources utilized in the SANS report.

1.1 PROJECT DESCRIPTION

The Arizona Department of Transportation (ADOT), Aeronautics Division reassesses the needs of the state's aviation system every five years. The previous needs assessment was completed in 1995. Given the significant population increases that Arizona has witnessed in recent years, it is imperative to develop an accurate assessment that can address this blossoming population and the growth associated with it. As the population bulges, the strains placed on the airport system become more evident. Needs increase not only for commercial service but also for improved cargo services, as well as medical and recreational support services. Population projections indicate this trend will continue throughout the state. Therefore, it is necessary for Arizona to approach the SANS study with a more unique methodology. Many factors that will have to be considered may not be critical in studies where population trends are stagnant.

Airports and aviation facilities in the state are considered to be part of a ***system*** with each reaping benefits of the other facilities in some manner. The primary goal of the SANS 2000 is to determine the existing status, condition and performance of this system and to evaluate the improvement needs of the system on a five-, ten- and twenty-year basis. Facilities considered in the SANS include all public and private (those open to public) airports, and heliports, as well as recreational and Native American airports. A listing of all public use facilities with their associated cities and counties is presented in Table 1-1.

TABLE 1-1: ***Arizona State Public Use Airports***

AIRPORT NAME	ASSOCIATED CITY	COUNTY
Ajo Municipal	Ajo	Pima
Apache Junction (New)	Apache Junction	Pinal
Avi Suquilla (NA)	Parker	La Paz
Bagdad	Bagdad	Yavapai
Benson Municipal	Benson	Cochise
Bisbee Douglas International	Douglas/Bisbee	Cochise
Bisbee Municipal	Bisbee	Cochise
Bowie	Bowie	Cochise
Buckeye Municipal	Buckeye	Maricopa
Casa Grande Municipal	Casa Grande	Pinal
Cascabel Airpark (Note 1)	Tucson	Pima
Chandler Municipal	Chandler	Maricopa
Chinle Municipal	Chinle	Apache
Cibecue Municipal (New)	Cibecue	Navajo
Cochise College	Douglas	Cochise
Cochise County	Willcox	Cochise
Colorado City Municipal	Colorado City	Mohave
Coolidge Municipal	Coolidge	Pinal
Cottonwood Municipal	Cottonwood	Yavapai
Douglas Municipal	Douglas	Cochise
Eagle Airpark	Aguila	Mohave
Eloy Municipal	Eloy	Pinal
Ernest A. Love Field	Prescott	Yavapai
Estrella Sailport	Maricopa	Pinal
Falcon Field	Mesa	Maricopa
Flagstaff-Pulliam	Flagstaff	Coconino
Flying J Ranch	Pima	Graham
Forepaugh	Wickenburg	Maricopa
Ganado (NA)	Ganado	Apache
Gila Bend Municipal	Gila Bend	Maricopa
Glendale Municipal	Glendale	Maricopa
Grand Canyon Bar-Ten	Whitmore	Mohave
Grand Canyon Caverns	Peach Springs	Coconino
Grand Canyon National Park	Grand Canyon	Coconino
Grand Canyon West	Meadview	Mohave
Grande Valley	Maricopa	Pinal
Greenlee County	Clifton/Morenci	Greenlee
H.A. Clark Memorial Field	Williams	Coconino
Holbrook Municipal	Holbrook	Navajo
Kayenta (NA)	Kayenta	Navajo
Kearny	Kearny	Pinal
Kingman	Kingman	Mohave
Lake Havasu City Municipal	Lake Havasu City	Mohave
Laughlin/Bullhead International	Bullhead City	Mohave
Marana NW Regional	Marana	Pima
Marble Canyon	Marble Canyon	Coconino

TABLE 1-1: ***Arizona State Public Use Airports (continued)***

AIRPORT NAME	ASSOCIATED CITY	COUNTY
Memorial Airfield (NA) (Note 1)	Chandler	Maricopa
Mogollon Airpark (Note 1)	Overgaard	Navajo
Nogales International	Nogales	Santa Cruz
Page Municipal	Page	Coconino
Payson	Payson	Gila
Pearce Ferry	Meadview	Mohave
Phoenix Deer Valley	Phoenix	Maricopa
Phoenix Goodyear	Goodyear	Maricopa
Phoenix Sky Harbor Int'l	Phoenix	Maricopa
Pinal Airpark	Marana	Pinal
Pleasant Valley	Peoria	Maricopa
Polacca (NA)	Polacca	Navajo
Quartzsite (New)	Quartzsite	La Paz
Rolle Airfield	Somerton	Yuma
Ryan Field	Tucson	Pima
Safford Regional	Safford	Graham
St. Johns Industrial Airpark	St. Johns	Apache
San Carlos Apache	Globe	Gila
San Manuel	San Manuel	Pinal
Scottsdale	Scottsdale	Maricopa
Sedona	Sedona	Yavapai
Seligman	Seligman	Yavapai
Sells (NA)	Sells	Pima
Show Low Municipal	Show Low	Navajo
Sierra Vista Muni/Libby AAF	Ft. Huachuca	Cochise
Stellar Airpark	Chandler	Maricopa
Sun Valley	Bullhead City	Mohave
Superior Municipal	Superior	Pinal
Taylor	Taylor	Navajo
Temple Bar	Temple Bar	Mohave
Tombstone Municipal	Tombstone	Cochise
Town of Springerville Municipal	Springerville	Apache
Tuba City (NA)	Tuba City	Coconino
Tucson International	Tucson	Pima
Tuweep	Tuweep	Mohave
Valle Airport	Grand Canyon	Coconino
Whiteriver (NA)	Whiteriver	Navajo
Wickenburg Municipal	Wickenburg	Maricopa
Williams Gateway	Phoenix	Maricopa
Window Rock (NA)	Window Rock	Apache
Winslow-Lindberg Regional	Winslow	Navajo
Yuma International	Yuma	Yuma

LEGEND:
NA = Native America
Note 1: Airport changec to "Private Use"

As we progress toward a more global economy, the impact of aviation cannot be understated. Efficient and safe access to and from a multitude of geographic locations is essential for maintaining pace in an ever-changing world. Growth in the 21st century will depend heavily on technology and transportation capabilities. Aviation facility improvements will be critical to Arizona continuing its remarkable growth rate. In all likelihood, new facilities will become necessary. Planning now for these improvements and new facilities is the key to success. Time is required to develop budget items and associated appropriations. Alternative funding mechanisms have to be considered and evaluated for viability in the event of a budget shortfall.

Decisions of this nature mandate that the information provided for decision making be comprehensive and accurate. Given the time restrictions associated with these decisions, the information must also present a concise picture of the overall statement. Cost projections must be realistic. Findings must be substantiated by adequate proof to prevent second-guessing. The SANS 2000 has been developed with these vital aspects in mind. While it is necessary to analyze a large volume of data, it is even more crucial to focus the conclusions in the areas with the greatest needs.

1.2 ISSUES

The SANS 2000 is designed to assess the needs of the aviation community as a whole. It presents an opportunity to consider numerous issues that impact aviation throughout the state. It also creates a forum to consider input from airport managers, pilots, economic development agencies, air service providers, and other potentially affected parties. Among the issues that will be considered in the development of SANS 2000 are the following:

- Differences in existing information in aviation data such as airport master plans, Regional Aviation System Plans (RASP), and the State Aviation System Plan (SASP)
- Needs study methodologies used in other states
- Educational and training needs of current and future system users
- Planning, engineering, construction costs, and cost trends
- Impact of advanced technological improvements
- Land-use compatibility issues
- Impact of environmental issues and constraints
- Potential return-on-investment of tax dollars
- Revenue and funding sources
- Identification of specific needs to improve existing facilities and to develop new facilities
- Medical aviation needs
- Aviation safety throughout the system

The order of listing of these issues does not reflect relative priorities. All of the issues are paramount in developing the SANS.

1.3 GOALS AND OBJECTIVES

The establishment of goals and objectives is essential in any data collection and interpretation task. The desired end product must be confirmed before the collection effort is initiated in order to prevent needless research. Defined goals and objectives are the key to this. The data evaluation process combines quantitative measures with qualitative interpretations. Setting goals and objectives at the onset allows the evaluation process to maintain focus and not become encumbered.

As previously stated, the primary goal of the SANS 2000 is to determine the existing status, condition and performance of Arizona's aviation system and to evaluate the improvement needs of the system on a five-, ten- and twenty-year basis. This study will provide guidance for the structured development of aviation facilities necessary to meet the State's needs through the year 2020. The SANS 2000 shall further incorporate requirements of the ADOT, Aeronautics Division and the Federal Aviation Administration (FAA).

To be an effective evaluation of the aviation system, it is essential to consider the "big picture." Becoming entangled in the needs of a particular facility or in short-term needs of the system will not benefit the entire system. It is necessary to consider long-range ideology. What will the needs of the system be in twenty years or fifty years? Laying effective groundwork in the present will prevent future difficulties. Having foresight now can result in significant savings down the road. As Federal funding becomes tighter and tighter, it is even more critical to budget and spend effectively. It is also necessary to address issues regarding environmental and social impacts of aviation facilities. To this cause, the following developmental goals have been established for Arizona's aviation system:

- Provision of adequate aviation facilities that can meet the transportation and economic needs of the state

- Maintenance of a system of airports and other aviation facilities that can ensure user safety while supplying better than adequate levels of service in terms of reliability and efficiency

- Amplification of the economic rewards and return on investment by improving Arizona's aviation facilities

- Cultivation of an air transportation system that is consistent with the long-term planning policies, land use issues, and surface transportation goals.

The specific objectives of the SANS 2000 can be stated in terms suited for the use of performance standards. The objectives listed below have been deemed significant to the State's aspiration of effective development of its aviation system.

- Facilitate commercial air service in both urban and rural areas throughout Arizona
- Ensure conformance with physical development standards established by Federal, state and local agencies
- Provide a system of aviation facilities within reasonable access time to all system users
- Promote the use of aviation facilities for the delivery of emergency and rural health care services
- Encourage economic development opportunities through the utilization of an effective aviation system
- Maintain compatibility with local land use patterns and plans
- Raise the efficiency of the aviation system
- Maximum the return on investment for aviation dollars
- Foster input from potentially impacted parties through a variety of means including public forums and questionnaires

1.4 REVIEW OF EXISTING PLANS

Numerous studies have preceded the SANS 2000. These studies have been conducted by a variety of entities including individual airports, regional planning agencies, and the ADOT, Aeronautics Division. These studies provide valuable information that must be considered during the compilation of the SANS 2000. Operations data, forecasting information, budget figures, and physical characteristics are just a few of the items that can be ascertained from these existing plans.

It is necessary to evaluate these extensive planning efforts for their applicability to the current study. Many times the previous studies are not current enough to consider the data valid. Other times their objectives are too site-specific to be beneficial to the study of the aviation system as a whole. In general, however, these studies have been conducted through the expenditure of a great deal of time that is not possible when assessing the needs of the entire state. It is this fact that makes reliance on these documents mandatory. Several aspects of the SANS 2000 accept the information in the existing plans "as is" with no exceptions. This is a necessary step in order to achieve the timeliness required.

The following sub-sections detail the background and sources of the existing planning efforts. In all cases the most recent study available has been reviewed.

Background

Aviation planning efforts in Arizona are conducted at multiple levels: national, state, regional, and local. The emphasis at each level varies as do the priorities. Different goals and objectives of the sponsors create this variance.

At the national level is the National Plan of Integrated Airports Systems (NPIAS) which is produced by the FAA. The NPIAS is based on information developed as a result of state and metropolitan/regional system planning and individual facility master planning as well as national forecasts and planning. It is a ten-year plan that is continually updated by the FAA. It lists the development of public use airports that are considered to be of national interest and are thus eligible for financial assistance for airport planning, maintenance, and development under the Federal Airport Improvement Program (AIP). To be considered for AIP funding, an aviation facility must be included in the NPIAS.

State level planning efforts are performed by ADOT. These efforts generally target the assessment of needs for new aviation facilities and the need for improvement of existing facilities. Studies at this level include the Continuous Aviation System Planning Process (CASPP) and a variety of special interest studies.

Regional planning efforts are conducted to identify the needs of larger regional/metropolitan areas that may have more specific interests. The needs are generally stated within the context of regional priorities and are normally incorporated into state planning efforts. Regional plans have been developed by Cochise County, the Maricopa Association of Governments (MAG), and the Pima Association of Governments (PAG).

Local planning efforts are reflected by individual airport master plans. These master plans are undertaken by local airport sponsors and operators. They detail the specific long-range plans of the facility within the framework of local community goals and objectives as well as statewide and regional/metropolitan system plans.

National Plan of Integrated Airport Systems (NPIAS)

As previously stated, NPIAS is an airport system plan developed by the FAA to indicate aviation facilities of national significance. NPIAS airports are eligible for federal grants for airport planning and various capital improvements. The NPIAS defines the status of an airport by its service level. The service level of a facility is reflective of the type of public service that the facility provides to the community. The service level is further indicative of the funding categories established by Congress to assist in airport development. The service levels categories identified by the NPIAS are as follows:

- Primary Service (PR) – Primary service airports are public use airports receiving scheduled airline passenger service which also enplane 10,000 or more passengers per year.

- Commercial Service (CM) – Commercial service airports are public use airports receiving scheduled airline passenger service which also enplane 2,500 or more passengers per year.

- General Aviation (GA) – General aviation airports are either publicly or privately owned public use airports that serve general aviation users.

- Reliever (RL) – Reliever airports are general aviation (RL) airports which have the function of relieving congestion at a Primary Service airport and which provide the

general aviation user or small commercial operator with an alternative for access to the overall community. Reliever airports receive higher priority for funding assistance than other general aviation or commercial service airports.

The most recent NPIAS, March 2000, lists 57 airports in Arizona. This includes ten primary airports, five non-primary commercial service airport, 33 general aviation airports and nine reliever airports.

Arizona State Aviation System Planning

The initial State Aviation System Plan (SASP) was prepared in 1973 and was updated in 1978 and 1988. The purpose of the SASP was to provide policy guidelines that would promote and maintain a safe aviation system in the State while providing an assessment of the needs of the system on a five-, ten-, and twenty-year basis.

In 1988 the SASP was replaced by the Continuous Aviation System Planning Process (CASPP). The components of the CASPP are stated below:

Volume I	Economic Impact of Aviation in Arizona (1990)
Volume II	Inventory of Aviation Activities (1988)
Volume III	Forecasts of Aviation Activity (1988)
Volume IV	Commuter Air Service Feasibility Study (1988)
Volume V	Land Use Compatibility (1992)
Volume VI	The Future of Aviation in Arizona (1988)

Other studies initiated by the State and identified in the 1995 SANS include a 1988 report on the needs of Native American airports, secondary airports, and other airports; a study in 1988 on the feasibility of a new regional airport facility in the Verde Valley area; the Arizona Recreational Airports System Plan conducted in 1992; a Pavement Management System Study from 1992; and the Arizona Regional Airport Feasibility Assessment Study done in 1993.

Studies performed by the state subsequent to these include the *Feasibility Study and Environmental Review for a Regional Rescue and Firefighter Training Facility (ARFF)* completed in 1995, *The Economic Impact of Aviation in Arizona* from 1998, and the *Navigational Aids and Aviation Services Special Study* completed in 1998. Completion of the *Arizona Rural Air Service Study* is still pending.

Past Aviation Needs Study Efforts

The previously stated goals of the SANS 2000 were similar to those of the past SANS studies. The SANS 2000 will be the fourth in a series of these broad spectrum analyses of the aviation system in Arizona.

The first SANS was developed in 1985. Its purpose was to address the five-, ten-, and twenty-year capital improvements needs for the aviation system in Arizona. Various performance levels were considered and projected revenues were compared to costs at each performance level. This process is very similar to the task at hand for SANS 2000.

A particularly unique aspect of the 1985 SANS was the use of comparison ratings to evaluate performance levels. This rating scheme compared an airport's overall ability to accommodate demand versus the total aviation demand in the State both at 1985 levels as well as future projection levels. Once a benchmark rating was determined, it was possible to evaluate numerous scenarios that could impact the benchmark. Cost projections could be made for various performance levels.

The SANS 1990 further refined the SANS 1985 rating methodology. The goal of SANS 1990 was to correlate the aviation system needs with state economic, social and environmental policies. Planners were able to gauge the level of attainment of various goals and objectives complying with these policies, thereby assuring effective management of taxpayer funds. An additional variable implemented into SANS 1990 was 50-year projection information.

The SANS 1995 evaluated needs projections on a five-, ten-, and twenty-year basis. The performance levels measured and the scenarios considered are similar to those utilized in SANS 2000. SANS 1995 promoted a methodology that would allow for an evaluation of the relationship between the performance of the system and capital investments placed into various parts of the system. This created the ability to interchange multiple capital investment scenarios and subsequently provide valuable insight into funding decisions.

All of the SANS efforts have attempted to encourage the input of a variety of individuals. The usage of questionnaires, the establishment of Planning Advisory Committees (PAC), and the public forums have fostered the development process.

Regional Airport System Plans (RASP)

At this time there are three RASP's in effect in Arizona. Entities undertaking RASP efforts include Cochise County, the Maricopa Association of Governments (MAG), and the Pima Association of Governments (PAG). These RASP's further define the goals and objectives of the airport system on a localized basis above and beyond the individual facility master plan goals. Unique goals of the various RASP's promote the development of somewhat dissimilar data than that obtained at the state level, but their evaluation is essential in the preparation of SANS 2000. The ability to minimize the study population increases the volume of information that can be considered. Brief descriptions of the current RASP efforts are detailed in the following paragraphs.

<u>Cochise County</u>
Two primary RASP efforts have been prepared for Cochise County. The initial RASP was done in 1982. The most recent effort was completed in 1994. Information from the 1994 Cochise County RASP was considered for SANS 1995. There were 13 airports evaluated by the RASP. The facilities included in the 1994 report are:

Public Use Airports		Private Airports
Sierra Vista Muni/Libby AAF	Douglas Municipal	Benson
Bisbee Municipal	Tombstone Municipal	Whetstone
Bisbee-Douglas Int'l	Bowie	San Simon
Cochise College	Benson (proposed in 1994)	McNeal
Cochise County		

The 1994 RASP considered inventory data from each airport; input from pilot/owners as well as the public; operations and aircraft forecasts; and socio-economic data. It also compared the existing facilities to the development guidelines established by ADOT planning efforts.

From the RASP, a listing of priority projects was produced. Among those projects identified by the 1994 RASP included additional taxiways and PAPIs at Sierra Vista/Libby AAF, a paved taxiway and navigational lighting at Cochise County, and the construction of the new Benson Municipal Airport.

Maricopa Association of Governments (MAG)

The first Maricopa Association of Governments RASP was completed in 1979 and was updated in 1986. Rapid development in Maricopa County prompted another revision of the plan in 1993. The data from the 1993 RASP was utilized in the SANS 1995. There has been no update of the MAG RASP since 1993, but the MAG recently received funding to initiate an update in 2001.

In 1996 MAG completed an Implementation Study of the RASP. This study identified over 100 aviation facilities in the region including 47 airports, 67 heliports, and three ultralight fields. Of this number, 16 were identified as important in meeting the aviation needs of the community and were designated System Airports. These 16 airports are as follows:

- Buckeye Municipal
- Chandler Municipal
- Estrella Sailport
- Falcon Field
- Gila Bend Municipal
- Glendale Municipal
- Memorial Airfield
- Phoenix Deer Valley
- Phoenix Goodyear
- Phoenix Sky Harbor
- Pleasant Valley
- Scottsdale
- Sky Ranch-Carefree
- Stellar Airpark
- Wickenburg Municipal
- Williams Gateway

Six primary data categories were identified by the Implementation Study: airport sketches, database, capital improvement program, intermodal needs, noise contours, and land use compatibility. Forecasting data utilized in the 1993 RASP was also utilized for this report. This forecasting information was previously considered in the SANS 1995.

Much of the focus of the 1996 RASP was to define potential projects under the capital improvement program. The RASP enumerates some 634 projects with an estimated cost of slightly under $1,000,000,000. Projects were categorized under such criteria as local interest, pavement maintenance, safety issues, design standard upgrades, navigational aids, and airport capacity, among others. The largest percentage of projects from a cost standpoint ($381 million) were proposed for Phoenix-Sky Harbor, which is not unexpected, given its crucial role in the state aviation system. Williams-Gateway also had numerous projects proposed ($297 million) to increase its capabilities.

Pima Association of Governments (PAG)

The Pima Association of Governments (PAG) adopted their initial RASP in 1985. The PAG RASP was updated in 1995. Projections were made through 2020 in the 1995 RASP.

The public use airports identified by the RASP include the following: Ajo Municipal, Marana NW Regional, Ryan Field, Sells, and Tucson International. LaCholla Airpark, which is privately-owned but allows limited public access, was also included. Pinal Airpark was included as well as Davis-Monthan Air Force Base.

The RASP identified numerous projects for each of the system facilities. The general conclusion of the RASP indicated if the proposed projects were implemented the system would be adequate to meet future needs of Pima County. It further recommended that the RASP be updated periodically to ensure that changes in existing needs or conditions could be considered.

Airport Master Plans

Several airport sponsors have prepared Master Plans for their facilities. These plans attempt to identify long-term development schemes on a localized basis. The goals and objectives of the individual facility are much more specific than at the state or regional levels.

Master plans provide forecasting data and project implementation information in an effort to support modernization of the facility. Much more emphasis can be placed on the individual needs of the facility and the desires of the local community.

One of the key elements derived from master planning efforts is an Airport Layout Plan (ALP). The ALP is a graphic representation of the facility depicting all existing improvements, location, pertinent clearance and dimensional information and other factors that can determine an airport's compliance with applicable standards. The ALP must be updated as improvements are made to the facility.

Other data obtained from master plans include based aircraft projections, operations forecasts for general aviation and commercial services (where available), and completed projects information among others.

Of the study airports identified, 64 were found to have completed master plans for their facility. Data from these has been selectively included in the development of SANS 2000.

Summary

Table 1-2 illustrates the planning efforts that have been undertaken in the State. These efforts include NPIAS, master plans, airport layout plans, regional airport system plans, and special studies. Table 1-3 indicates the action taken on specific airports in this study that were included in the 1995 State Aviation Needs Study.

TABLE 1-2: *Arizona State Aviation System Planning Efforts*

AIRPORT NAME	ASSOCIATED CITY	NPIAS		Master Plan		ALP		RASP		Special Studies
		Yes	Role	Yes	Year	Yes	Year	Yes	Year	
Ajo Municipal	Ajo	X	GA	X	1999	X	1999	X	1994	A, B, D
Apache Junction (New)	Apache Junction									
Avi Suquilla (NA)	Parker	X	GA	X	1997	X	1985			A, B
Bagdad	Bagdad	X	GA	X	1998	X	1998			A, B, D
Benson Municipal	Benson	X	GA	X	1990	X	1990	X	1994	A, B, D
Bisbee Douglas International	Douglas/Bisbee	X	GA	X	1997	X	1997	X	1994	A, B, D
Bisbee Municipal	Bisbee	X	GA	X	1999	X	1999	X	1994	A, B, D
Bowie	Bowie							X	1994	A, B
Buckeye Municipal	Buckeye	X	GA	X	1998	X	1998	X	1996	A, B, D
Cascabel Airpark (Note 1)	Tucson									A
Casa Grande Municipal	Casa Grande	X	GA	X	1997	X	1997			A, B, D
Chandler Municipal	Chandler	X	RL	X	1997	X	1997	X	1996	A, B, D
Chinle Municipal	Chinle	X	GA	X	1990	X	1990			A
Cochise College	Douglas			X	1983	X	1983	X	1994	A, B
Cochise County	Willcox	X	GA	X	1997	X	1997	X	1994	A, B, D
Colorado City Municipal	Colorado City	X	GA	X	1999	X	1999			A, B
Coolidge Municipal	Coolidge	X	GA	X	1997	X	1997			A, B, D
Cottonwood Municipal	Cottonwood	X	GA	X	1993	X	1993			A, B, D
Douglas Municipal	Douglas			X	1994	X	1994	X	1994	A, B, D
Eagle Airpark	Bullhead City		GA							
Eloy Municipal	Eloy	X	GA	X	1997	X	1997			A, B, D
Ernest A. Love Field	Prescott	X	CM	X	1997	X	1997			A, B, D
Estrella Sailport	Maricopa							X	1996	A, B
Falcon Field	Mesa	X	RL	X	1997	X	1997	X	1996	A, B, D
Flagstaff-Pulliam	Flagstaff	X	PR	X	1991	X	1991			A, B, D
Flying J Ranch	Pima									A, B
Forepaugh	Wickenburg									
Ganado (NA)	Ganado	X	GA							A, B
Gila Bend Municipal	Gila Bend	X	GA	X	1995	X	1995	X	1996	A, B, D
Glendale Municipal	Glendale	X	RL	X	1998	X	1998	X	1996	A, B, D
Globe-San Carlos Regional	Globe	X	GA	X	1998	X	1998			A, B
Grand Canyon Bar-Ten	Whitmore									A, B
Grand Canyon Caverns	Peach Springs									A, B
Grand Canyon National Park	Grand Canyon	X	PR	X	1991	X	1991			A, B, D
Grand Canyon West	Peach Springs	X	GA	X	1997	X	1997			A, B
Grande Valley	Maricopa									
Grapevine/Roosevelt Lake	Gila County									A
Greenlee County	Clifton/Morenci	X	GA	X	1993	X	1993			A, B, D
H.A. Clark Memorial Field	Williams	X	GA	X	1995	X	1995			A, B, D
Holbrook Municipal	Holbrook	X	GA	X	1999	X	1999			A, B, D
Kayenta (NA)	Kayenta	X	GA	X	1987	X	1987			A, B
Kearny	Kearny			X	1994	X	1994			A, B, D
Kingman	Kingman	X	GA	X	1980	X	1980			A, B, D
Lake Havasu City Municipal	Lake Havasu	X	PR	X	1999	X	1999			A, B, D
Laughlin/Bullhead International	Bullhead City	X	PR	X	1999	X	1999			A, B, D
Marana NW Regional	Marana	X	RL	X	1999	X	1999	X	1994	A, B, D
Marble Canyon	Marble Canyon									A, B
Memorial Airfield	Chandler.			X	1996	X	1996	X	1996	A, B
Mogollon Airpark (Note 1)	Overgaard									
Nogales International	Nogales	X	GA	X	1992	X	1992			A, B
Page Municipal	Page	X	PR	X	1992	X	1992			A, B, D
Payson	Payson	X	GA	X	1998	X	1998			A, B, D
Pearce Ferry	Meadview									A, B

TABLE 1-2: *Arizona State Aviation System Planning Efforts (continued)*

AIRPORT NAME	ASSOCIATED CITY	NPIAS		Master Plan		ALP		RASP		Special Studies
		Yes	Role	Yes	Year	Yes	Year	Yes	Year	
Phoenix Deer Valley	Phoenix	X	RL	X	1998	X	1998	X	1996	A, B, D
Phoenix Goodyear	Goodyear	X	RL	X	1998	X	1998	X	1996	A, B, D
Phoenix Sky Harbor Int'l	Phoenix	X	PR	X	1998	X	1998	X	1996	A, B
Pinal Airpark	Marana	X	GA	X	1991	X	1991	X	1994	A, B
Pleasant Valley	Peoria			?	?			X	1996	A
Polacca (NA)	Polacca			X	1977	X	1977			A, B
Quartzsite (New)	Quartzsite	X	GA	X	1991	X	1991			A, B
Rolle Airfield	Somerton									A, B
Ryan Field	Tucson	X	RL	X	1999	X	1999	X	1994	A, B, D
Safford Regional	Safford	X	GA	X	1998	X	1998			A, B, D
St. Johns Industrial Airpark	St. Johns	X	GA	X	1998	X	1998			A, B, D
San Carlos Apache	Globe	X	GA	X	1998	X	1998			A, B
San Manuel	San Manuel			X	1997	X	1997			A, B, D
Scottsdale	Scottsdale	X	RL	X	1997	X	1997	X	1996	A, B, D
Sedona	Sedona	X	GA	X	1999	X	1999			A, B, D
Seligman	Seligman			X	1993	X	1993			A, B
Sells (NA)	Sells							X	1994	A, B
Show Low Municipal	Show Low	X	GA	X	1991	X	1991			A, B, D
Sierra Vista Muni/Libby AAF	Sierra Vista	X	PR	X	1996	X	1996			A, B, D
Stellar Airpark	Chandler			X	1979			X	1996	A, B
Sun Valley	Bullhead City									A, B
Superior Municipal	Superior									A, B
Taylor	Taylor	X	GA	X	1995	X	1995			A, B, D
Temple Bar	Temple Bar	X	GA							A, B
Tombstone Municipal	Tombstone			X	1999	X	1999	X	1994	A, B
Town of Springerville Municipal	Springerville	X	GA	X	1995	X	1995			A, B, D
Tuba City (NA)	Tuba City	X	GA							A, B
Tucson International	Tucson	X	PR	X	1996	X	1996	X	1994	A, B
Tuweep	Tuweep									A, B
Valle Airport	Grand Canyon									
Whiteriver (NA)	Whiteriver	X	GA	X	1998	X	1998			A, B
Wickenburg Municipal	Wickenburg	X	GA	X	1992	X	1992			A, B, D
Williams Gateway	Phoenix	X	RL	X	1999	X	1999	X	1996	A, B, D
Window Rock (NA)	Window Rock	X	GA	X	1981	X	1981			A, B
Winslow-Lindberg Regional	Winslow	X	GA	X	1998	X	1998			A, B
Yuma International/MCAS Yuma	Yuma	X	PR	X	1998	X	1998			A, B, D

KEY

ALP Airport Layout Plan
CM Commercial Service Airport
GA General Aviation Airport
NA Native American
NPIAS National Plan of Integrated Airport Systems
PR Primary Commercial Service Airport
RASP Regional Aviation System Plan
RL Reliever Airport

SPECIAL STUDIES LEGEND

A: 1995 State Aviation Needs Study (SANS)
B: 1998 Navigational Aids and Aviation Services Special Study
C: Small Community Aviation Economic Development
D: Pavement Management Study

Note 1: Airport changed to "Private Use"

TABLE 1-3: 1995 SANS *Airports Modified or Removed from the SANS 2000 Study*

AIRPORT NAME	ASSOCIATED CITY	REASON
Ak-Chin Community	Ak-Chin	Private Use facility
Apache Junction (New)	Apache Junction	No longer a viable airport candidate site
Avra Valley	Marana	Airport name changed to Marana Northwest Regional
Camp Verde	Camp Verde	Airport closed
Cliff Dwellers Lodge	Marble Canyon	Private Use facility
Hualapai Triball	Peach Springs	Airport name changed to Hualapai. Private Use facility
Inscription House	Inscription House	Airport closed
Low Mountain	Low Mountain	Airport closed
Lukachukai	Lukachukai	Private Use facility
Ora Acres	Quartzite	Airport closed
Pleasant Valley International	Young	Airport name changed to Peasant Valley Airstrip. Private Use facility
Pulliam-Flagstaff	Flagstaff	Name in error. See Flagstaff-Pulliam
Quartizite (New)	Quartizite	No longer a viable airport candidate site
Rio Vista Hills	Wickenburg	Private Use facility
Rock Point	Rock Point	Private Use facility
Shonto	Shonto	Private Use facility
Sky Ranch Carefree	Carefree	Private Use facility
Springerville Babbit Field	Springerville	Airport name changed to Town of Springerville Municipal
Taylor Municipal	Taylor	Name in error. See Taylor
Toyei School	Ganado	Airport closed
Winslow Municipal	Winslow	Airport name changed to Winslow-Lindberg
Alamo Lake (ERA)	La Paz County	Dropped from study. To be re-evaluated
Big Lake/Sunrise (ERA)	Apache County	Dropped from study. To be re-evaluated
Chiricahua Mountains (ERA)	Cochise County	Dropped from study. To be re-evaluated
Cibola (ERA)	La Paz County	Dropped from study. To be re-evaluated
Leupp/Painted Desert (ERA)	Coconino County	Dropped from study. To be re-evaluated
Mogollon Airpark (ERA)	Overgaard	Private Use facility
Peach Springs (New)	Peach Springs	Dropped from study. To be re-evaluated
Sprucedale (New)	Greenlee County	Dropped from study. To be re-evaluated
Bullhead City Seaplane Base	Bullhead	Dropped from study. To ber e-evaluated
Lake Havasu Seaplane Base	Lake Havasu City	Active
Lake Mead Seaplane Landing Area	Temple Bar	Active
Lake Roosevelt Seaplane Landing Area	Globe	Active
Lake Powell Seaplane Landing Area	Page	Active

Source: ADOT Aeronautics 2000